

## Federal Communications Commission Washington, DC 20554

April 15, 2010

Bruce D. Jacobs, Esq. Tony Lin, Esq. Pillsbury Winthrop Shaw Pittman LLP 2300 N Street, NW Washington, DC 20037-1128

Re: Application File No. SAT-LOA-20090807-00084, Call Sign S2795

Dear Messrs. Jacobs and Lin:

On August 7, 2009, Pegasus Development DBS Corporation (Pegasus) filed the above-captioned application to construct, launch, and operate a 17/24 GHz Broadcasting-Satellite Service (BSS) space station, PEGASUS 95W, at the 95.0° W.L. orbital location. In its application, Pegasus states that it intends to operate the space station at the 95.0° W.L. orbital location with ± 0.05-degree longitudinal stationkeeping.

Section 25.114(d) of the Commission's rules require an applicant for a space station authorization to submit a description of the design and operational strategies that it will use to mitigate orbital debris, including a statement that the space station operator has assessed and limited the probability of the space station becoming a source of debris by collisions with other operational space stations.<sup>2</sup> Where the applicant requests an orbital location with a station-keeping volume that overlaps with the station-keeping volumes of the other spacecraft at the requested orbital location, the statement must include the measures that will be taken to prevent in-orbit collisions. The mitigation of orbital debris serves the public interest by preserving the United States' continued affordable access to space, the continued provision of reliable U.S. space-based services, and the continued safety of persons and property in space and on Earth.<sup>3</sup>

In its application, Pegasus identifies two satellites at or near its requested orbital location: SPACEWAY 3 at 94.95° W.L., and Galaxy 3C at 95.05° W.L. These two satellites are authorized by the Commission to operate at these orbital locations, each with  $\pm$  0.05-degree

<sup>&</sup>lt;sup>1</sup> PEGASUS DEVELOPMENT DBS CORPORATION, Authority to Construct, Launch, and Operate a Broadcasting-Satellite Service System, IBFS File No. SAT-LOA-20090807-00084 (filed August 7, 2009) (PEGASUS 95W Application). The application was placed on public notice as accepted for filing on October 2, 2009. Policy Branch Information, Satellite Space Applications Accepted for Filing, *Public Notice*, Report No. SAT-00636. Comments were filed by Hughes Network Systems, LLC and SES Americom, Inc.

<sup>&</sup>lt;sup>2</sup> 47 C.F.R. § 25.114(d)(14)(iii).

<sup>&</sup>lt;sup>3</sup> Mitigation of Orbital Debris, *Second Report and Order*, 19 FCC Rcd. 11,567 ¶ 1 (2004).

longitudinal station-keeping.<sup>4</sup> Thus, the proposed longitudinal station-keeping limits for PEGASUS 95W overlap the authorized longitudinal station-keeping limits for both SPACEWAY 3 and Galaxy 3C by 0.05 degree of longitude. Pegasus indicates, "it will physically coordinate its satellite operations with the two applicable operators prior to launch and operations. Possible coordination solutions include agreeing to maintain tighter station-keeping volumes for the satellites, flying the satellites in formation, or operating one or more of the satellites at offset orbital locations."<sup>5</sup>

To assist the Commission in determining whether Pegasus's orbital debris mitigation plan serves the public interest, we request that Pegasus provide additional information concerning the feasibility of the three possible physical coordination solutions Pegasus has identified in its filings before the Commission (*i.e.*, maintaining tighter station-keeping limits for the satellites, flying the satellites in formation, and/or operating one or more of the satellites at an offset location). Please provide an assessment of feasibility for these proposed measures. With respect to tighter station-keeping limits, please include as part of the assessment an analysis of the potential impact of this approach upon the mission life of the two existing satellites and Pegasus's proposed satellite. With respect to flying satellites in formation, please include as part of the assessment the steps it has taken to identify the measures currently used for station-keeping the existing satellites, and the specific measures that would enable formation flying, including any changes required in the operations of the existing satellites. With respect to operation of one or more of the satellites at an offset location, Pegasus should provide further details concerning the specific satellites and proposed orbital locations.<sup>6</sup> Pegasus should also detail what, if any, contact it has had with the operators of satellites at this location regarding the feasibility of physical coordination.

In order to expedite further processing of the PEGASUS 95W application, Pegasus must file its response to this letter in the form of an amendment to its underlying application within 45 days of the date of this letter with a courtesy copy to Mark Young (mark.young@fcc.gov) and Chip Fleming (chip.fleming@fcc.gov) of my staff. In its amendment, Pegasus may also provide

<sup>&</sup>lt;sup>4</sup>IBFS File No. SAT-MOD-20050523-00106, Call Sign S2663, SPACEWAY 3 Conditions of Authorization, dated June 29, 2006; IBFS File No. SAT-MOD-20040405-00079, Call Sign S2381, Galaxy 3C Conditions of Authorization, June 15, 2004.

<sup>&</sup>lt;sup>5</sup> PEGASUS 95W Application, Exhibit at 2.

<sup>&</sup>lt;sup>6</sup> We note that the nearest currently authorized 17/24 GHz BSS satellites are EchoStar EX-3 at 79° W.L. and DIRECTV RB-1 at 99.175° W.L. *See* IBFS File Nos. SAT-LOA-20020328-00050, Call Sign S2440 (EchoStar EX-3), and SAT-LOA-20060908-00099, Call Sign S2711 (DIRECTV RB-1).

any other information it believes will assist the Commission in evaluating the application with respect to minimizing the risk of collisions with other spacecraft while PEGASUS 95W is operating in the geostationary orbit. If the information is not provided within this period, the application may be dismissed pursuant to Sections 25.112(c) and 25.152(b) of the Commission's rules. Please contact Mark Young or Chip Fleming if you have any questions.

Sincerely,

Robert G. Nelson Chief, Satellite Division, International Bureau

cc: Stephen D. Baruch, Esq. Karis A. Hastings, Esq.

<sup>&</sup>lt;sup>7</sup> 47 C.F.R. §§ 25.112(c) and 25.152 (b)